



COPY OF PAPERS  
ORIGINALLY FILED

RECEIVED

JUL 26 2002

TECH CENTER 1600/2900

underlined = deleted in targeting construct

**bold** = sequence flanking Neo insert in targeting construct

CAGGGTCTCCCTTCAACCTGAGGAGAGGTGCACACACTCTGAGGACCTAGGTGTGCAAC  
CTCTGCCAGATGTGGGGCGTGGCTACCCAGAGGCATGCCCTCACCCAGCTCCACTGTCC  
CCACCTGCTGCTGCTGTGGTGTGTCATGTCAGGCCAGAGGCACCCCTGCCAGGT  
AATGGACTTTGTTGAGAAGTGGAAAGCTCTATAGTGACCAATGTCAACCACAACCTAAG  
CCTGCTGCCCTACACTGAGCTGGTGTGTAACAGAACCTTCGACAACACTCCTGCTG  
GCCTGACACCCCTCCAAACACCAACTGCCAACATTCTGCCCTGGTACACTACCTGGT  
CCACAAAGTGCAGCACCGCCTAGTGTCAAGAGGTGTGGGGCGATGGCAGTGGTTCG  
AGGGCCACGGGGCAGCCGTGGCCAAACGCCCTCCAAATGTCAAGTGGATGATGAAAGAGAT  
CGAGGTC~~CC~~**AGA**GGGGGTGGCCAAAGATGTATAGCAGCCAGCAGGTGATGTACACCGTGG  
CTACAGTCTGTCCTGGGGCTTGTCTCTTGCGCTGGTCATCCTGCTGGCCTCAGGAA  
GCTGCACTGCACCCAAACTACATCCATGGGAACCTGTTGCGTCCTTGTGCTCAAGGC  
TGGCTCTGTGTTGGTCATCGATTGGTGTGTAAGACACGGTACAGCCAGAAGATTGGCGA  
TGACCTCAGTGTGAGCGTCTGGCTCAGTGACGGCGATGGCGGCTGCAGAGTGCCAC  
AGTGATCATGCGAGTACGGCATACACCAACTATTGCTGGTTGCTGGTAGAGGGCGTGT  
CCTGTACAGCCTGCTGAGCCTTGCACCTCTCTGAGAGGAGCTTCTTCCCTCACCT  
GGGCATTGGCTGGGTGCGCCCTGCTGTTGTCATCCCTGGGTGGTGTCAAGTGTCT  
GTTGAGAATGTTAGTGTGCTGGACCAGCAATGACAACATGGGATTCTGGTGGATCCTGCG  
TATTCCCTGTCTTCCCTGGCTTAAGTGTGTCATCTTGTCCACATCATTCAACT  
TCTTGTGGCAAGCTGCGTGGCCATCAGATGCACTATGCTGATTACAAGTCCGGCTGG  
CAGGTCCACGCTGACCCATCCCTGCTGGGGTCCAC**GAGGTGGTCTTGGCTTGT**  
**GACTGACGAGCATGCCAAGCACCCTGCGCTCCACCAAGCTCTTGTACCTGTTCT**  
**CAGCTCCTCCAGGGTCTGCTGGTGGCTGTTCTACTGTTCTCAACAAGGAGGTGCA**  
GGCAGAGCTGATGCGCGTGGAGGCAATGGCAAGAAGGAAAGCTCTCAGGAGGAAAG  
GTTGGCAGCAGCCATGGCAGCCACATGGCCCGAGCAGGGCTTGTGATGGTGTGATCCCTG  
TGAGAAACTTCAGCTTATGAGTGCAGGCAGCAGCAGCTGGGACTGGCTGTGCCCCCTAT  
GGAGACCTCGCTGCCAGTAGTCTCCAAAGGTTGCTGACAGCCCCACCTGAATCTCCAC  
TTGGAGCCTAGGCAGGTTGTTCAAGAAAGGGCTCAGAGGACAACCCAGAGCCAGATG  
CCCGGCCAAGGTTGAAGAGCCAAGCAGCAAGACAGCAGCTGTACTGTGACACTCCCC  
TAACCTGCTCTAGCTGGCACAGGCCACAGTGACAGAGTAGGGTTGGATATGATGGAGA  
AGCCATGTTATCTGAACTCTGAGTGTGTCATGTGTTGACATGGTCCCTGTACCCA  
GATATGTCCTTCAAGTAAAGCTGAGTGGAGCTGCTGACAGCTCGTGGACAGCAGGCT  
TGAAGCCCCCAGGGACGGGGTTGGGAGGGCGGGATGAGCAGCACACTCAGCAGGTGGA  
CGCCTAGTGCAACCCAGGAAAGAA (SEQ ID NO: 1)

FIGURE 2A



COPY OF PAPERS  
ORIGINALLY FILED

RECEIVED

JUL 26 2002

TECH CENTER 1600/2900

underlined = deleted in targeting construct

**bold** = sequence flanking Neo insert in targeting construct

CAGGGTCTCCCTTGCAACCTGAGGAGAGGTGCACACACTCTGAGGACCTAGGTGTGCAAC  
CTCTGCCAGATGTGGGGCGTGGCTACCCAGAGGCATGCCCTCACCCAGCTCCACTGTCC  
CCACCTGCTGCTGCTGTTGGTGTGTCATGTCAGGCCAGAGGCACCCCTGCCAGGT  
AATGGACTTTTGTGAGAAGTGGAAAGCTCTATAGTACCAATGTCACCACAAACCTAAG  
CCTGCTGCCCCACCTACTGAGCTGGTCTGTAACAGAACCTCGACAACACTCCTGCTG  
GCCTGACACCCCTCCAACACCAACTGCCAACATTCCCTGCCCTGGTACCTACCTGGTG  
CCACAAAGTGCAGCACCGCCTAGTGTCAAGAGGTTGGGCCATGGCAGTGGTTCG  
AGGGCCACGGGGCAGCCGTGGCGAACGCCCTCCAAATGTCAGTTGGATGATGAAGAGAT  
CGAGGTCCAGAAGGGGGTGGCCAAGATGTATAGCAGCCAGCAGGTGATGTACACCGTGGG  
CTACAGTCTGCCCCGGGGCCTTGCTCCTTGCGCTGGTCATCCTGCTGGGCTCAGGAA  
GCTGCACTGCACCCGAAACTACATCCATGGAACCTGTTGCTCCTTGTGCTCAAGGC  
TGGCTCTGTGTTGGTCATCGATTGGCTGCTGAAGACACGGTACAGCCAGAAGATTGGCGA  
TGACCTCAGTGTGAGCGTCTGGCTCAGTGACGGGCGATGGCCGCTGCAGAGTGGCCAC  
AGTGTACATGCAGTACGGCATCACACCAACTATTGCTGGTTGCTGGTAGAGGGCGTGT  
CCTGTCAGCCTGCTGAGCCTTGCCACCTCTGAGAGGAGCTTCTTCCCTACCT  
GGGCATTGGCTGGGGTGCAGCCCTGCTGTTGTCATCCCTGGTGGTCAAGTGTCT  
GTTTGAGAATGTTCACTGCTGGACCAGCAATGACAACATGGGATTCTGGTGATCCGCG  
TATTCCCTGCTTCCCTGGCCTTACTGATCAATTTCATCTTGTCCACATCATTCAACT  
TCTTGTCGCCAAGTGCAGCCATCAGCACTATGCACTATGTCAGTACAGTCAAGTCCGGCTGGC  
CAGGTCAACGCTGACCCCTCATGGCTGGGGCACAGGTTGGCTTTGCTTGT  
GAATGACGAGCATGCCCAAGGCACCCCTGGCTCCACCAAGCTCTTTTGACCTGTTCCCT  
CAGCTCCCTCCAGGGTCTGCTGGCTGTTCTACTGTTCCCTCAACAAGGAGGTGCA  
GGCAGAGCTGATGCGCGTGGAGGCAATGGCAAGAAGGCAAAGCTTCAAGGAGGAAAG  
GTTGGCCAGCAGCCATGGCAGCCACATGGCCAGCAGCAGTGGACTGGCTGTGCCCCCT  
TGAGAAACTTCAGCTTATGAGTGCAGGAGCAGCAGTGGACTGGCTGTGCCCCCTAT  
GGAGACCTCGCTGGCCAGTAGTCTCCCAAGGTTGGCTGACAGGCCCCACCTGAATCTCCAC  
TTGGAGCCTAGGCAGGTTGTCAGAAAGGCCCCAGAGGACAACCCAGAGCCAGATG  
CCCGGCCAAGGTTGAAGAGCCAAGCAGCAAGACAGCAGCTTGTACTGTGCACACTCCCC  
TAACCTGTCCTAGCCTGGCACAGGCCACAGTGCACAGAGTAGGGGTTGGATATGATGGAGA  
AGCCATGTTATCTATGAACCTGAGTGTCCCAGTGTGTTGACATGGCCCTGTACCCA  
GATATGTCCTCAGTAAAAGCTCGAGTGGAGCTGCTGCACAGCTGTGGACAGCAGGCT  
TGAAGCCCCCAGGGACGGGGTTGGGAGGCCGGGATGAGCAGCACACTCAGCAGGTGGA  
GCGCTAGTGCACCCAGGAAAGAA (SEQ ID NO:1)

FIGURE 2A